

Factorising - putting brackets back in  
- always look for common factors.

$$6a + 3$$
$$= 3(2a + 1)$$

3 'goes into'  $6a$  &  $3$

$$x^2 + 6x$$
$$= x(x + 6)$$

$x$  'goes into'  $x^2$  &  $6x$

$$12ab + 4a$$
$$= 4a(3b + 1)$$

$4a$  'goes into'  $12ab$  &  $4a$

Also we can factorise anything that looks like  $a^2 - b^2$  into  $(a+b)(a-b)$

eg  $x^2 - 25 = (x + 5)(x - 5)$

$$a^2 - 49 = (a + 7)(a - 7)$$

$$16 - b^2 = (4 + b)(4 - b)$$

$$25y^2 - 9 = (5y + 3)(5y - 3)$$

!! learn your square numbers !!